

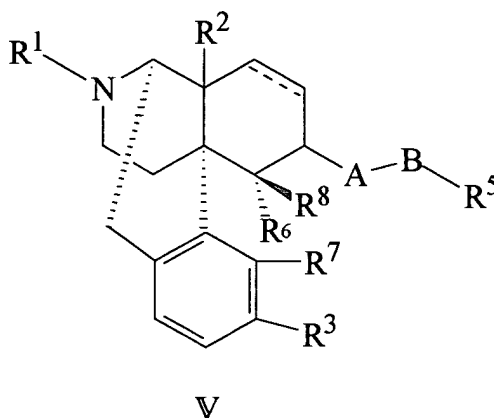
IN THE CLAIMS

Please cancel claims 1-62.

Please amend the following claims as shown:

~~1-62.~~ (Amended) A method for the prevention or treatment of pruritus in a mammal in need of such prevention or treatment comprising administering to said mammal an effective anti-pruritic amount of the composition [of claim 63.] formula V or a pharmaceutically acceptable salt thereof

A2  
T, 0550



wherein

----- represents a single or double bond;

R<sup>1</sup> represents an alkyl group having 1-5 carbon atoms, a cycloalkylalkyl group having 4-7 carbon atoms, a cycloalkenylalkyl group having 5-7 carbon atoms, an aryl group having 6-12 carbon atoms, an aralkyl group having 7-13 carbon atoms, an alkenyl group having 4-7 carbon atoms, an allyl group, a furan-2-ylalkyl group having 1-5 carbon atoms, or a thiophen-2-ylalkyl group having 1-5 carbon atoms;

R<sup>2</sup> represents a hydrogen atom, a hydroxy group, a nitro group, an alkanoyloxy group having 1-5 carbon atoms, an alkoxy group having 1-5 carbon atoms, an alkyl group having 1-5 carbon atoms, or -NR<sup>9</sup>R<sup>10</sup> wherein R<sup>9</sup> represents a hydrogen atom or an alkyl group having 1-5 carbon atoms, and R<sup>10</sup> represents a hydrogen atom, an alkyl group having 1-5 carbon atoms, or -C(=O)R<sup>11</sup>

55

wherein R<sup>11</sup> represents a hydrogen atom, a phenyl group or an alkyl group having 1-5 carbon atoms;

R<sup>3</sup> represents a hydrogen atom, a hydroxy group, an alkanoyloxy group having 1-5 carbon atoms, or an alkoxy group having 1-5 carbon atoms;

A represents -XC(=Y)-, -XC(=Y)Z-, -X-, -XSO<sub>2</sub>-, or -OC(OR<sup>4</sup>)R<sup>4</sup>- where, X, Y and Z each independently represent NR<sup>4</sup>, S or O wherein R<sup>4</sup> represents a hydrogen atom, a straight-chain or branched chain alkyl group having 1-5 carbon atoms or an aryl group having 6-12 carbon atoms, and wherein R<sup>4</sup> may be identical or different;

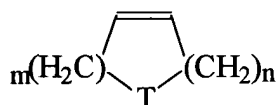
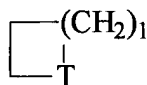
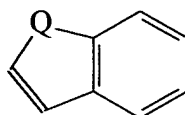
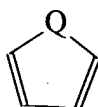
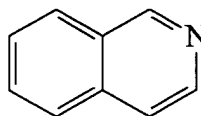
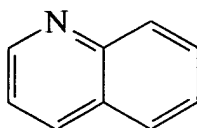
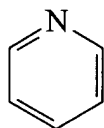
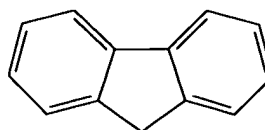
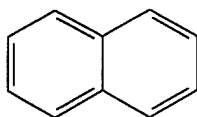
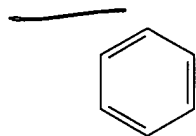
B represents a valence bond, a straight-chain or branched chain alkylene group having 1-14 carbon atoms which may be substituted with at least one substituent selected from the group consisting of an alkoxy group having 1-5 carbon atoms, an alkanoyloxy group having 1-5 carbon atoms, a hydroxy group, fluorine, chlorine, bromine, iodine, an amino group, a nitro group, a cyano group, a trifluoromethyl group and a phenoxy group, and wherein 1 to 3 methylene groups may be replaced with carbonyl groups, an acyclic unsaturated hydrocarbon containing from 1 to 3 double bonds and/or triple bonds and having 2-14 carbon atoms which may be substituted with at least one substituent group selected from the group consisting of an alkoxy group having 1-5 carbon atoms, an alkanoyloxy group having 1-5 carbon atoms, a hydroxy group, fluorine, chlorine, bromine, iodine, an amino group, a nitro group, a cyano group, a trifluoromethyl group and a phenoxy group, and wherein from 1 to 3 methylene groups may be replaced with carbonyl groups, or a straight-chain or branched chain saturated or unsaturated hydrocarbon group containing from 1 to 5 thioether, ether and/or amino bonds and having 1-14 carbon atoms wherein hetero atoms are not bonded directly to A, and 1 to 3 methylene groups may be replaced with carbonyl groups;

R<sup>5</sup> represents a hydrogen atom or an organic group which may be substituted with at least one or more substituent groups selected from the group consisting of an alkyl group having 1-5 carbon atoms, an alkoxy group having 1-5 carbon atoms, an alkanoyloxy group having 1-5 carbon atoms,

56

a hydroxy group, fluorine, chlorine, bromine, iodine, an amino group, a nitro group, a cyano group, an isothiocyanate group, a trifluoromethyl group and a methylenedioxy group; or

R<sub>5</sub> is



wherein

Q is N, O or S;

T is CH, N, S or O;

l is 0-5;

m and n are > 0

m + n < 5;

R<sup>6</sup> represents a hydrogen atom;

R<sup>7</sup> represents a hydrogen atom, a hydroxy group, an alkoxy group having 1-5 carbon atoms, an alkanoyloxy group having 1-5 carbon atoms, or R<sup>6</sup> and R<sup>7</sup> together represent -O-, -CH<sub>2</sub>- or -S-;  
and

57

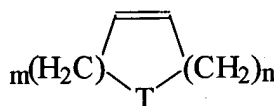
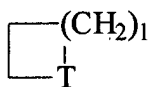
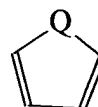
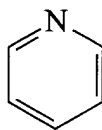
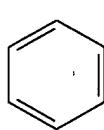
R<sup>8</sup> represents a hydrogen atom, an alkyl group having 1-5 carbon atoms, or an alkanoyl group having 1-5 carbon atoms in a pharmaceutically acceptable carrier.--

--2. (Amended) A method for the prevention or treatment of pruritus in a mammal in need of such prevention or treatment comprising administering to said mammal an effective anti-pruritic amount of the composition of claim [64.] ~~67~~ wherein

R<sup>1</sup> is an alkyl group having 1-5 carbon atoms, a cycloalkylmethyl group having 4-7 carbon atoms, a cycloalkenylmethyl group having 5-7 carbon atoms, a phenylalkyl group having 7-13 carbon atoms, an alkenyl group having 4-7 carbon atoms, an allyl group, a furan-2-yl-alkyl group having 1-5 carbon atoms and a thiophen-2-yl-alkyl group having 1-5 carbon atoms;

R<sup>2</sup> is hydrogen, hydroxy, nitro, acetoxy, methoxy, methyl, ethyl, propyl, amino, dimethylamino, acetylamino or benzoylamino groups; or

R<sup>4</sup> is



Formula V-1

wherein

Q is N, O or S;

T is CH, N, S or O;

m and n are  $\geq 0$  and

m + n  $\leq 5$ ;

58

B is  $-(CH_2)_n-$  wherein  $n = 0-6$ ,  $-(CH_2)_n-C(=O)-$  wherein  $n = 1-4$ ,  $-CH=CH-(CH_2)_n-$  wherein  $n = 0-4$ ,  $-C\equiv C-(CH_2)_n-$  wherein  $n=0-4$ ,  $-CH_2-O-$ ,  $-CH_2-S-$ ,  $-CH_2-O-(CH_2)_2-O-(CH_2)_2-$ ,  $-CH_2-O-CH_2-NH-CH_2-O-CH_2-$  and  $-CH_2-O-CH_2-S-CH_2-O-CH_2-$ ;

*A3, Cond*  
 $R^5$  is hydrogen or an organic group of Formula V-1 said organic group may be substituted with at least one substituent group selected from the group consisting of an alkyl group having 1-5 carbon atoms, an alkoxy group having 1-5 carbon atoms, an alkanoyloxy group having 1-5 carbon atoms, a hydroxy group, fluorine, chlorine, bromine, an amino group, a nitro group, a cyano group, an isothiocyanate group and a trifluoromethyl group.--

*11*  
~~77~~ (Amended) A method for the prevention or treatment of pruritus in a mammal in need of such prevention or treatment comprising administering to said mammal an effective anti-pruritic amount of the composition of claim [65.] ~~72~~ wherein

$R^1$  is methyl, ethyl, cyclopropylmethyl, cyclobutylmethyl, cyclopentylmethyl, cyclopentenylmethyl, cyclohexenylmethyl, benzyl, phenethyl, trans-2-butenyl, 2-methyl-2-butenyl, allyl, furan-2-yl-methyl or thiophen-2-yl-methyl;

*A4*  
 $R^2$  is hydrogen, hydroxy, nitro, acetoxy, methyl or dimethylamino;

$R^3$  is  $-NR^4C(=O)-$ ,  $-NR^4C(=S)-$ ,  $-NR^4C(=O)O-$ ,  $-NR^4C(=O)NR^4-$ ,  $-NR^4C(=S)NR^4-$  or  $-NR^4SO_2-$ ;

$R^4$  is a straight-chain or branched alkyl group having 1-5 carbon atoms;

B is  $-(CH_2)_n-$  wherein  $n=0-6$ ,  $-CH=CH(CH_2)_n-$  wherein  $n=0-4$ ,  $-C\equiv C-(CH_2)_n-$  wherein  $n=0-4$ ,  $-CH_2-O-$  or  $-CH_2-S-$ ; and

$R^5$  is hydrogen, phenyl, 3,4-dichlorophenyl, 4-chlorophenyl, 3-chlorophenyl, 3,4-difluorophenyl, 4-fluorophenyl, 3-fluorophenyl, 2-fluorophenyl, 4-bromophenyl, 3-bromophenyl, 2-bromophenyl, 4-nitrophenyl, 3-nitrophenyl, 2-nitrophenyl, 4-trifluoromethylphenyl, 3-trifluoromethylphenyl, 2-trifluoromethylphenyl, 4-methylphenyl, 3-methylphenyl, 2-methylphenyl, 4-methoxyphenyl, 3-methoxyphenyl, 2-methoxy, 3-furanyl, 2-furanyl, 3-thienyl, 2-thienyl, cyclopentyl or cyclohexyl.--

16  
 -82. (Amended) A method for the prevention or treatment of pruritus in a mammal in need of such prevention or treatment comprising administering to said mammal an effective anti-pruritic amount of the composition of claim [66.] ~~77~~ wherein said compound is elected from the group consisting of:

17-cyclopropylmethyl-4,5a-epoxy-3,14b-dihydroxy-6b-(N-methyl-3-phenylpropionamido)morphinan;

17-cyclopropylmethyl-4,5a-epoxy-3,14b-dihydroxy-6b-(N-methyl-trans-3-(3-furyl)acrylamido)morphinan;

AB  
17-cyclopropylmethyl-4,5a-epoxy-3,14b-dihydroxy-6b-(N-methyl-trans-3-cyclohexylacrylamido)morphinan;

17-cyclopropylmethyl-4,5a-epoxy-3,14b-dihydroxy-6b-(N-methyl-trans-3-(4-trifluoromethylphenyl)acrylamido)morphinan;

17-cyclopropylmethyl-4,5a-epoxy-3,14b-dihydroxy-6a-(N-methyl-trans-3-(3-thiophenyl)acrylamido)morphinan;

17-cyclopropylmethyl-4,5a-epoxy-3,14b-dihydroxy-6b-(N-methyl-trans-3-phenylacrylamido)morphinan;

17-cyclopropylmethyl-4,5a-epoxy-3,14b-dihydroxy-6b-(N-methyl-trans-2-hexenamido)morphinan; and

17-cyclopropylmethyl-4,5a-epoxy-3,14b-dihydroxy-6b-(N-methyl-phenylpropiolamido)morphinan.--

### REMARKS

In parent application Serial No. 08/892,599 (now U.S. Patent No. 5,760,023) claims 1-18 were prosecuted covering Formula I.

In the first divisional application Serial No. 08/064,695 claims 19-38 were prosecuted covering formulas II, IIa and IIb (now U.S. Patent No. 5,869,521).

In the second divisional application Serial No. 09/184,393, claims 39-50 were prosecuted covering formula III. This case has now issued as U.S. Patent No. 6,004,694.

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